

ARATA 2012 - Assistive Technology and the NDIS

There was a lot of discussion at ARATA in Sydney (August 22-24) about the NDIS and the need to emphasise the importance of assistive technology (AT). This culminated in the release of an impressive ARATA position statement, in the form of a brochure that is to be widely distributed. The fear is that AT will be overlooked by policy-makers.

Those in the field know how important AT is in giving people with a disability greater independence, productivity and connectedness. It is the pathway to achievement of most of the aspirations of the NDIS.

Another key issue is the need

for AT services. Appropriate AT needs to be identified and customised; training and support are needed. It is here that the boundaries between AT expertise and the freedom of choice the NDIS promises for PWD, becomes a bit fuzzy. When should AT expertise be required and when should it be optional - giving PWD the choice to make decisions without that expert advice? In some cases, where safety issues or large costs are involved, the line is a bit clearer. The details will need to be worked out in the months ahead.

You can get the ARATA position paper at: <http://www.arata.org.au/wiki/doku>.

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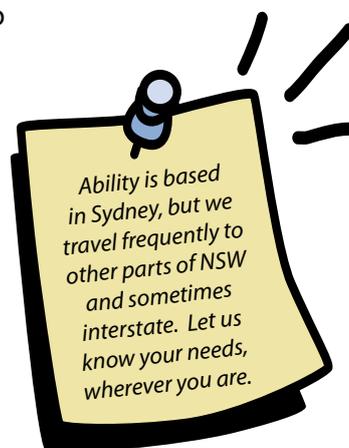
ENABLE Equipment Loan Pool Trial Project

EnableNSW is launching a pilot project of a model of service provision in the prescription, trial and provision of environmental control and computer access systems. The model involves a partnership between EnableNSW, Ability Technology, local prescribers, and eligible EnableNSW consumers. The pilot seeks to address the challenges prescribers and consumers have in accessing devices and technical expertise in a highly specialised and rapidly changing area of assistive technology.

Through the pilot, local prescribers will be able to borrow devices for trial and access comprehensive clinical and technical support through the trial period. If trials are successful, prescribers will be able to apply for permanent allocation of the equipment for their consumer.

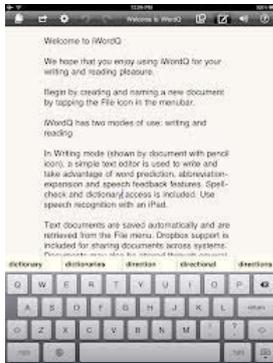


The pilot will commence in late 2012, enquiries can be directed to EnableNSW on 1800 362 253 or Ability Technology 02-9907 9736.



WORD PREDICTION on a Tablet

Word prediction has been a useful tool on a computer, but it is also available on iPads and Android tablets. It may be more helpful in this new context, as typing is often more restrictive and limited by the size of the device. Here are a few options for you to consider.



iWORD Q is now available for the iPad. It is a tool for writing and reading. In writing mode, it provides tools such as in-context word prediction, abbreviation expansion, usage examples and text-to-speech feedback. It also has very useful and flexible advanced proofreading mode offering * Play by steps (reads current sentence and cues next sentence), * Play by sentence (reads current sentence and stops) and Play automatically (reads continuously until the end of the document)



ABILIPAD is another useful writing tool for the iPad. It features word prediction, text-to-speech and a very powerful keyboard editor - cells can be resized, merged, coloured and have sounds attached.



TYP-O is available for the iPad as well as the Mac. It features word prediction, text-to-speech and powerful spell checking options. Text can be emailed direct or copied into other apps. It has four synthetic voices, choice of US and UK English, three levels of spelling error compensation and four vocabulary sizes. Note that the text-to-speech is "cloud based", meaning you have to have access to the internet to use it. Interestingly, the Typ-O word prediction engine is used in the Predictable app. Typ-O has been well received by those with dyslexia.

SWIFTKEY 3 is an Android app that offers next-word prediction and smart auto-correction based on the context of your sentence. SwiftKey uses client-based patented Natural Language Processing techniques to understand the relationship between words, offering powerful corrections and next-word predictions. SwiftKey dynamically adapts the touch-sensitive area of its keys, based on your actual touchscreen input actions, resulting in predictions that are based not just on the words you use, but also the way you type. Choose from "rapid" and "precise" typing styles to fine-tune how SwiftKey predicts your words and corrects your mistakes.



ASSISTIVE TECHNOLOGY FACEBOOK GROUP

The "Assistive Technology and Environmental Control" facebook group is proving a great resource for people in this field. It was started by Leigh Lockrey a few months ago. Ability's own Facebook page (see details elsewhere in this issue) enables us to quickly publish short reviews and news items.

NO-TOUCH SWITCHES - When near enough is good enough

For many people with a disability, using a switch is the only method available to control assistive technology devices and computers. But in many cases, the process of activating a switch can be onerous and fatiguing. Even small switches and those requiring only delicate touch can be difficult.

There are several "proximity" switches that do not require the user to make physical contact with any external device. Movement itself can become the trigger for activating a switch signal.



One such device is the **SCATIR Switch** (Self-Calibrating Auditory Tone Infrared), which is a momentary-contact optical switch with auditory feedback. The SCATIR Switch sensor works by detecting a beam of reflected pulsed infrared light. It is suitable for use with a variety of control gestures, such as eye-blink, eyebrow movement, finger movement, head movement, and facial muscle movement. It can be activated at a distance so the controlling body part does not need to be in physical contact with the switch sensor. Active range is around 3 cm.

Another similar option is the **Reflective Beam Switch** from AMDi. It has a maximum range of about 20cm.



AMDi also make a range of proximity switches of different shapes and sizes, requiring very light touch

or movement very close to the switch (without touching it). Some function through headrests, trays, vinyl, foam, wood and plastic. These include the Flat Mini-Beam Sensor, the Ultra-Thin Proximity Sensor, the Mini Moon Proximity Sensor, the Non-Adjustable Proximity Sensor, the Adjustable Proximity Sensor and the Cylindrical Proximity Sensor.

All sensors must be used in conjunction with the AMDi custom designed rechargeable Power Control Modules (PCM).



CANBERRA WORKSHOP - COMPUTER ACCESS - 17 October

Sean Fitzgerald & Dr Graeme Smith

Ability Technology, in conjunction with Hartley Lifecare, will be conducting its next assistive technology workshop in Canberra on **Wednesday 17 October 2012, from 2-4 pm** at Hartley's assistive technology centre, 6 Hodgson Place, Pearce, ACT. The topic will be **computer access** and will include a special focus on speech recognition. To make a booking call 6282-4411.

Our last workshop for 2012, on **Memory Aids & Tablet Access**, will be on 5 December 2012.

ECU E-Book

Ability continues to develop its E-Book on environmental control options. The E-Book provides practical information based on testing at Ability House, where each device has been tested with X-10, C-Bus and direct IR modules. This consistency in testing procedures gives unique comparative information, for people with a disability, therapists, disability organisations and funding bodies.

In order to continue testing new products, we have offered the E-Book for sale at a cost of \$60. Contact us at info@ability.org.au if you are interested.

ABILITY PROJECTS AND ACTIVITIES

Ability at ARATA

The ARATA (Australian Rehabilitation and Assistive Technology Association) Conference in Sydney (August 22-24) was an opportunity for Ability to host a stand. This provided a venue for our staff to meet with others in the AT field from all over Australia, as well as potential clients from Sydney and elsewhere in NSW. The atmosphere was warm and friendly. It was great to hear what everyone else in the AT field was doing!

Ability also contributed to the conference itself. Dr Graeme Smith presented a paper on Tablets, while Gemma McDonald and Bronwyn Simpson presented a paper on Memory Aids. Gemma also conducted a poster presentation on our ECU E-Book (see above) while Rowena Clarke talked to her poster on our Portable Games project results. Graeme was also a member of the organising committee.

The next ARATA Conference will be held in Canberra in 2014.



ABILITY FACEBOOK PAGE

Ability has now created a Facebook page and this can be accessed at www.facebook.com/abilitytechnology. Here you will find a flow of information about products and activities, as well as interesting discussions.

Product Testing

A vital part of our "behind-the-scenes" work involves testing and evaluating new devices and software. All members of the Ability team are involved. We are constantly on the lookout for new options for our clients.

Sometimes these new solutions come from our clients themselves. Many of them are vigilant in seeking new possibilities for themselves, and these may benefit others in similar circumstances. In other cases, we read journals and magazines, search the internet or visit retail shops! There are many sources for new ideas.

Testing and evaluation will involve looking at safety and reliability, functionality and strategic importance - where the device fits in. We share our insights on Facebook, our web site and here, in our Newsletter.



ABILITY News

■ We have recently conducted a number of **workshops** in assistive technology for occupational therapists. These are usually held on-site and are often part of regular team meetings or in-service training programs in the organisation. Sometimes they are held at Ability.

The advantage of these workshops is that they are tailored to

the specific needs of the group. Please contact us if you are interested.

■ Our intrepid IT Administrator, **Guy Rowell**, has done some great work recently using the built-in speech recognition in Windows and Mac, to control a wireless environmental control system called RedEye. The system also works with Dragon

Naturally Speaking Professional; in this case, you can also use a device such as an iPad to act as a wireless microphone to issue commands.

There is a distinct lack of voice-controlled ECU options. Guy's work will provide an important low-cost option for many people. Contact us if you require more details.

ABILITY Staff - Gemma McDonald

Gemma is an Occupational Therapist who joined Ability in early 2007. After graduating in 1997 she established a sound background in vocational rehabilitation in Sydney before developing her career in a variety of positions in the UK. These included work in hospitals, community occupational therapy and special needs housing, with adults and children. She has developed specialised skills in assessments for environmental control technology and computer access, as

well contributing to our training, product testing, advice and



support services. She also conducts workshops for therapists in various organisations. Gemma has completed post-graduate studies in ergonomics and is currently completing a Masters in Health Science (OT).

ABILITY Services - Training

Training is vital for people with a disability, to ensure competence and confidence with their assistive technology system. Our staff have considerable experience in training people with a variety of needs in the use of their devices and software.

The training cycle (instruction, practice, correction,

further practice, competence) for a person with a disability is usually longer than for a person without a disability, as movements may be slower due to physical or cognitive impairments. Training sessions may be limited by fatigue, pain or limited concentration.

In some cases family members and carers need to

receive training as well, as they will often be the first port of call to provide assistance.

Sometimes training can be provided through CBT (computer-based training) or by remote connection to the client's computer.

Contact Ability if you require more information.

Ability Technology

ABN 26 090 463 997

29 Frenchs Forest Rd, Seaforth NSW 2092 Australia

P: 02-99079736 F: 02-99079599 E: info@ability.org.au W: www.ability.org.au

